TACHYCARDIAS - ADULT

FIELD ASSESSMENT/TREATMENT INDICATORS

1. Signs and symptoms of poor perfusion.

2. Heart rate greater than 150 bpm.

BLS INTERVENTIONS

1. Recognition of heart rate greater than 150 bpm.

2. Reduce anxiety; allow patient to assume position of comfort.

3. Administer oxygen as clinically indicated.

4. Consider transport to closest hospital or ALS intercept.

ALS INTERVENTIONS

Determine cardiac rhythm, obtain a 12 lead ECG to better define rhythm if patient condition allows, establish vascular access and proceed to appropriate intervention(s).

Narrow Complex Supraventricular Tachycardia (SVT)

1. Initiate NS bolus of 300ml IV.

2. Valsalva/vagal maneuvers.

3. Adenosine 6mg rapid IV push, followed by 20ml NS rapid infusion. If no conversion, may repeat twice at 12mg followed by 20ml NS rapid infusion.

4. If adenosine is ineffective, consider Verapamil 5mg slow IV over three (3) minutes. May repeat every fifteen (15) minutes to a total dose of 20mg.

5. Consider Procainamide 20mg/min IV for suspected Wolf-Parkinsons White; may repeat until arrhythmia suppressed, symptomatic hypotension, QRS widens by more than 50% or maximum dose of 17mg/kg given. If arrhythmia suppressed, begin infusion of 2mg/min.

6. Synchronized cardioversion; refer to Protocol Reference #10120.

7. Contact Base Station.

V-Tach or Wide Complex Tachycardias (Intermittent or Sustained)

1. Consider Adenosine administration if the rate is regular and the QRS is monomorphic. Adenosine is contraindicated for unstable rhythms or if the rhythm is an irregular or polymorphic wide complex tachycardia.

2. Procainamide 20mg/min IV; may repeat until arrhythmia suppressed, symptomatic hypotension, QRS widens by more than 50% or maximum dose of 17mg/kg given. If arrhythmia suppressed, begin infusion of 2mg/min.

3. If Procainamide administration is contraindicated or fails to convert the rhythm, consider Lidocaine 1mg/kg slow IV. May repeat at 0.5mg/kg every ten (10) minutes until maximum dose of 3mg/kg given and initiate infusion of 2mg/min.

4. Polymorphic VT should receive immediate unsynchronized cardioversion (defibrillation). Consider infusing Magnesium 2gms in 100ml of NS over five (5) minutes if prolonged QT is observed during sinus rhythm post-cardioversion.

5. Precordial thump for witnessed spontaneous Ventricular Tachycardia, if defibrillator is not immediately available for use.

6. Synchronized cardioversion; refer to Protocol Reference #10120.

7. Contact Base Station.

Atrial Fib/Flutter

1. Transport to appropriate facility.

2. For patients who are hemodynamically unstable, proceed to Synchronized cardioversion; refer to Protocol Reference #10120.

3. Contact Base Station.